

We claim:

1. A method of providing World Wide Web navigation to an end-user using a wireless access device, comprising:

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initiating a data connection between the wireless access device and a wireless access server;

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serving a Web page to the wireless access device over the data connection, the Web page including one or more hyper-links, one of said hyper-links linking to a pre-selected speech server;

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in response to an end-user clicking on the one of said hyper-links, initiating a voice connection between the wireless access device and the pre-selected speech server;

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providing an interactive voice response session over the voice connection between the speech server and the wireless access device, whereby voice prompts are provided to the end-user and the end-user's responses are provided back to the speech server;

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performing a speech to text conversion on a user's spoken command, the converted command indicating a desired resource;

forwarding the converted command from the speech server to the wireless access server; and

serving the desired resource to the wireless access device over the data connection.

2. The method of claim 1 wherein the data connection between the wireless access device and the wireless access server is a wireless access protocol (WAP) connection.

3. The method of claim 1 wherein the user's spoken command is a shortcut associated with the uniform reference indicator of the desired resource.

4. The method of claim 1 wherein the wireless access device is a cellular telephone.

5. The method of claim 1 wherein the wireless access device is a personal digital assistant.

6. A method of providing World Wide Web navigation services to an end-user using a wireless access device comprising:
  - 5 storing to a database at least one universal resource indicator (URI) and an associated shortcut phrase;  
  
providing a speech server that is accessible to the wireless access device;  
  
10 receiving a spoken command from an end-user;  
  
converting the spoken command into a text command;  
  
15 comparing the text command to the shortcut phrase stored in the database;  
  
in response to a determination that the text command matches the stored shortcut phrase, providing the URI associated with the stored shortcut phrase to a wireless access server;  
  
20 accessing the provided URI and sending the resource having the URI from the wireless access server to the wireless access device.  
  
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7. The method of claim 6 wherein the resource is a World Wide Web page.

8. The method of claim 6 wherein the wireless access device is a cellular telephone.

9. The method of claim 6 wherein the wireless access device is a personal digital assistant.

10. The method of claim 6 wherein the speech server and the wireless access device communicate using the public switch telephone network.

11. The method of claim 6 wherein the speech server and the wireless access device communicate using a cellular telephone switch.

12. The method of claim 6 wherein the wireless access server and the wireless access device communicate using wireless access protocol (WAP).

13. The method of claim 6 further comprising:

verifying the identify of a user based upon a spoken user identifier.

14. A system for voice driven navigation of a computer network, the computer network having a plurality of network resources, each such resource having associated with it a unique resource identifier, comprising:

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a wireless access device;

a wireless switch configured to receive transmissions from the wireless access device and the forward the transmissions to a public switched telephone network;

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a speech server coupled to the public switched telephone network, configured to receive voice commands contained in the transmissions from the wireless access device and to convert the voice commands into text commands;

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the speech server being further configured to retrieve from a database a resource indicator matching the converted text command and to forward the retrieved resource indicator to a wireless access server;

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the wireless access server coupled to the speech server, and being configured to retrieve the resource associated with the resource and to serve the resource to the wireless access device.

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15. The system of claim 14 wherein the computer network is the Internet.

16. The system of claim 14 wherein the resource is a World Wide Web page.

17. The system of claim 14 wherein the resource is served to the  
5 wireless access device using wireless application protocol.

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FOIA b7D b7E b7F b7G b7H b7I b7J b7K b7L b7M b7N b7O b7P b7Q b7R b7S b7T b7U b7V b7W b7X b7Y b7Z

18. A speech server configured to provide voice driven access for navigation of a computer network, the computer network including a plurality of resources, each such resource having a network address associated with it, comprising:
  - 5 a call manager coupled to a telephone network and configured to receive an incoming voice call initiated from a wireless calling device;
  - 10 a speech to text converter coupled to the call manager, receiving as input a spoken phrase associated with a desired network address and converting the spoken phrase into a text command;
  - 15 a comparator, coupled to the speech to text converter and configured to compare the text command to entries stored in a network address database;
  - 20 a network connection coupled to the computer network and configured to forward a selected network address from the network address database to a computer network server, whereby the computer network server will serve up the resource associated with the selected network address to the wireless calling device.
19. The speech server of claim 18 wherein the computer network is the Internet.
20. The speech server of claim 18 wherein the resource is a World Wide Web page.